

Project:

Perzow

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WSB Parki Wiatrowe Sp. z o.o.

ul. Tadeusza Mikulskiego 5

PL-52 420 Wrocław

+48 796537212

Maciej Nawrotek / m.nawrotek@wsb-parkiwiatrowe.pl

Calculated:

2015-11-10 09:24/2.9.269

DECIBEL - Main Result

Calculation: kumulacja

Noise calculation model:

ISO 9613-2 Poland

Wind speed:

Loudest up to 95% rated power

Ground attenuation:

General, Ground factor: 0,0

Meteorological coefficient, C0:

0,0 dB

Type of demand in calculation:

1: WTG noise is compared to demand (DK, DE, SE, NL etc.)

Noise values in calculation:

All noise values are mean values (Lwa) (Normal)

Pure tones:

Pure and Impulse tone penalty are added to WTG source noise

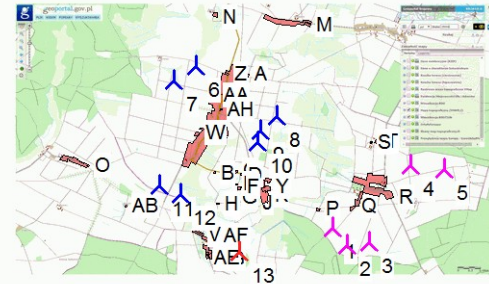
Height above ground level, when no value in NSA object:

4,0 m Allow override of model height with height from NSA object

Deviation from "official" noise demands. Negative is more restrictive,

positive is less restrictive.:

0,0 dB(A)



New WTG

Scale 1:200 000
Noise sensitive area

WTGs

Geo DMS: WGS 84				WTG type				Noise data				Wind speed [m/s]	Status	Lwa,ref [dB(A)]	Pure tones
Longitude	Latitude	Z	Row data/Description	Valid	Manufact.	Type-generator	Power, rated [kW]	Rotor diameter [m]	Hub height [m]	Creator	Name				
1 17°50'47,44" East	51°11'20,95" North	178,0	3EW1 419 D107,5 N105	Yes	VESTAS	V90-3 000	3 000	90,0	105,0	EMD	Level 0 - - 107,0 dB(A) - 06-2009	8,0	User value	107,5	0 dB h
2 17°51'08,61" East	51°11'06,56" North	180,0	3EW2 251/3 D107,5 N 106,5	Yes	VESTAS	V90-3 000	3 000	90,0	105,0	EMD	Level 0 - - 107,0 dB(A) - 06-2009	8,0	User value	107,5	0 dB h
3 17°51'37,71" East	51°11'09,33" North	175,0	3EW3 60 D107,5 N106,5	Yes	VESTAS	V90-3 000	3 000	90,0	105,0	EMD	Level 0 - - 107,0 dB(A) - 06-2009	8,0	User value	107,5	0 dB h
4 17°52'32,92" East	51°12'16,25" North	187,5	2EW1	Yes	VESTAS	V90-3 000	3 000	90,0	105,0	EMD	Level 0 - - 107,0 dB(A) - 06-2009	8,0	User value	107,5	0 dB h
5 17°53'19,12" East	51°12'13,62" North	185,0	2EW2	Yes	VESTAS	V90-3 000	3 000	90,0	105,0	EMD	Level 0 - - 107,0 dB(A) - 06-2009	8,0	User value	107,5	0 dB h
6 17°47'36,49" East	51°13'38,00" North	170,3	TRE_56	No	REpower	3.2M114-3 200	3 200	114,0	110,0	EMD	Level 0 - Guaranteed - Sound power level - 07-2013	6,0	User value	107,5	0 dB h
7 17°47'06,89" East	51°13'25,23" North	170,0	TRE_41	No	REpower	3.2M114-3 200	3 200	114,0	110,0	EMD	Level 0 - Guaranteed - Sound power level - 07-2013	6,0	User value	107,5	0 dB h
8 17°49'29,06" East	51°12'56,21" North	175,0	TRE_747/1W	No	REpower	3.2M114-3 200	3 200	114,0	110,0	EMD	Level 0 - Guaranteed - Sound power level - 07-2013	6,0	User value	107,5	0 dB h
9 17°49'06,99" East	51°12'43,83" North	173,2	TRE_513	No	REpower	3.2M114-3 200	3 200	114,0	110,0	EMD	Level 0 - Guaranteed - Sound power level - 07-2013	6,0	User value	107,5	0 dB h
10 17°49'03,36" East	51°12'33,46" North	174,6	TRE_517	No	REpower	3.2M114-3 200	3 200	114,0	110,0	EMD	Level 0 - Guaranteed - Sound power level - 07-2013	6,0	User value	107,5	0 dB h
11 17°46'49,40" East	51°11'54,67" North	175,0	TRE_303	No	REpower	3.2M114-3 200	3 200	114,0	110,0	EMD	Level 0 - Guaranteed - Sound power level - 07-2013	6,0	User value	107,5	0 dB h
12 17°47'19,73" East	51°11'47,47" North	170,0	TRE_333	No	REpower	3.2M114-3 200	3 200	114,0	110,0	EMD	Level 0 - Guaranteed - Sound power level - 07-2013	6,0	User value	107,5	0 dB h
13 17°48'40,95" East	51°10'59,26" North	170,0	brzezinka	Yes	ENERCON	E-82 E4-3 000	3 000	82,0	92,0	EMD	Level 0 - official - Mode 0 - 08/2014	(95%)	User value	104,0	0 dB h

h) Generic octave distribution used

Calculation Results

Sound Level

Noise sensitive area

Geo DMS: WGS 84				Demands		Sound Level		Demands fulfilled ?	
No.	Name	Longitude	Latitude	Z	Imission height	Noise	From WTGs	Distance to noise demand	Noise
				[m]	[m]	[dB(A)]	[dB(A)]	[m]	
A	trebaczow1	17°48'22,64" East	51°12'41,04" North	177,0	4,0	45,0	42,8	202	Yes
B	zbyczyna10	17°48'03,99" East	51°12'06,56" North	171,9	4,0	45,0	40,3	554	Yes
C	zbyczyna11	17°48'36,27" East	51°12'09,18" North	172,7	4,0	45,0	41,1	383	Yes
D	zbyczyna12	17°48'43,03" East	51°12'06,85" North	171,4	4,0	45,0	41,0	381	Yes
E	zbyczyna9	17°48'36,79" East	51°11'58,05" North	170,0	4,0	45,0	39,5	678	Yes
F	zbyczyna8	17°48'36,57" East	51°11'55,59" North	170,0	4,0	45,0	39,2	749	Yes
G	zbyczyna7	17°48'31,09" East	51°11'45,83" North	170,0	4,0	45,0	38,6	907	Yes
H	zbyczyna6	17°48'08,40" East	51°11'41,27" North	170,0	4,0	45,0	39,9	486	Yes
I	zbyczyna5	17°48'22,24" East	51°11'38,32" North	170,0	4,0	45,0	38,7	769	Yes
J	zbyczyna4	17°48'46,34" East	51°11'40,00" North	170,0	4,0	45,0	38,1	951	Yes
K	zbyczyna1	17°49'07,22" East	51°12'02,73" North	170,0	4,0	45,0	40,6	420	Yes
L	domaslow	17°49'14,05" East	51°14'18,13" North	172,8	4,0	45,0	33,0	1 797	Yes
M	domaslow szczescie	17°50'10,94" East	51°14'13,22" North	170,5	4,0	40,0	31,8	1 601	Yes
N	domaslow2	17°47'58,90" East	51°14'20,60" North	170,0	4,0	45,0	35,6	920	Yes
O	dziadowa kloda gronowice	17°45'13,35" East	51°12'11,07" North	172,8	4,0	40,0	32,8	1 100	Yes
P	rychtal4	17°50'29,56" East	51°11'36,10" North	171,5	4,0	45,0	43,6	93	Yes
Q	rychtalmn	17°51'11,13" East	51°11'36,27" North	175,0	4,0	40,0	44,0	-519	No
R	rychtal1	17°51'17,35" East	51°11'40,60" North	175,0	4,0	45,0	42,4	268	Yes
S	rychtal2	17°51'37,92" East	51°12'34,04" North	180,0	4,0	45,0	37,7	740	Yes
T	rychtal3	17°51'50,63" East	51°12'34,70" North	180,0	4,0	45,0	38,7	540	Yes
U	namyslow brzezinka	17°47'38,09" East	51°11'18,96" North	170,2	4,0	40,0	39,6	48	Yes
V	namyslow2	17°47'37,38" East	51°11'17,53" North	170,7	4,0	45,0	39,4	508	Yes

To be continued on next page...

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DECIBEL - Main Result**Calculation:** kumulacja

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Noise sensitive area		Geo DMS: WGS 84		Z	Imission height	Demands		Sound Level		Demands fulfilled ?	
No.	Name	Longitude	Latitude			Noise	From WTGs	Distance to noise demand	Noise	Noise	
				[m]	[m]	[dB(A)]	[dB(A)]	[m]			
	W trebaczow2	17°47'43,66" East	51°12'40,62" North	175,0	4,0	45,0	39,4	955		Yes	
	X zbyczyna2	17°49'14,83" East	51°12'03,45" North	172,1	4,0	45,0	40,7	417		Yes	
	Y zbyczyna3	17°49'16,38" East	51°11'56,73" North	170,7	4,0	45,0	39,4	627		Yes	
	Z mieszkalno usługowa trebaczow	17°48'17,09" East	51°13'31,81" North	175,0	4,0	45,0	41,2	330		Yes	
	AA Szkoła podstawowa trebaczow	17°48'06,69" East	51°13'14,71" North	180,0	4,0	50,0	41,2	667		Yes	
	AB Dz.Kłoda zag rolna	17°46'05,41" East	51°11'37,39" North	175,0	4,0	45,0	38,5	534		Yes	
	AC Brzezinka Mr zagr 1	17°48'09,99" East	51°11'12,05" North	170,0	4,0	45,0	39,3	407		Yes	
	AD Brzezinka Mr zagr 2	17°48'02,33" East	51°11'00,68" North	171,0	4,0	45,0	38,5	439		Yes	
	AE Brzezinka Mr zagr 3	17°47'58,10" East	51°10'56,77" North	171,2	4,0	45,0	37,7	525		Yes	
	AF Brzezinka Mn jedno1	17°48'11,78" East	51°11'13,07" North	170,5	4,0	40,0	39,4	86		Yes	
	AG Brzezinka Mn jedno3	17°48'02,64" East	51°10'57,68" North	170,8	4,0	40,0	38,4	160		Yes	
	AH przedszkole	17°48'13,16" East	51°13'01,11" North	176,6	4,0	50,0	40,9	869		Yes	

Distances (m)

WTG													
NSA	1	2	3	4	5	6	7	8	9	10	11	12	13
A	3695	4296	4690	4915	5759	702	1031	1248	865	817	816	754	2590
B	3442	4006	4480	5183	6076	2819	2621	2190	1616	1358	1494	1042	2186
C	2924	3505	3954	4600	5493	2956	2884	1778	1226	916	2048	1547	2103
D	2771	3353	3802	4473	5365	3071	3018	1768	1234	912	2166	1644	2028
E	2767	3331	3806	4619	5503	3282	3179	2064	1532	1210	2031	1470	1776
F	2656	3215	3696	4534	5414	3373	3272	2092	1575	1249	2079	1499	1652
G	2651	3182	3689	4702	5570	3625	3480	2410	1893	1568	1993	1387	1381
H	3078	3585	4108	5185	6052	3660	3428	2763	2215	1902	1589	964	1381
I	2818	3321	3846	4965	5825	3804	3613	2711	2183	1861	1872	1246	1202
J	2096	2625	3133	4216	5072	3877	3782	2368	1933	1609	2316	1698	1191
K	1845	2409	2885	3851	4715	3431	3455	1700	1270	953	2631	2058	1423
L	5430	5933	5980	4579	5222	2207	2904	2430	2842	3169	5240	5158	6113
M	5371	5877	5927	4545	5196	3091	3774	2515	3028	3350	5763	5576	6244
N	6380	6971	7206	6463	7248	1387	1987	3071	3218	3494	4707	4793	6255
O	6670	7181	7704	8536	9432	3865	3180	5156	4647	4519	1933	2560	4602
P	583	1187	1561	2667	3466	4952	5085	2653	2542	2341	4219	3609	2312
Q	660	920	957	1807	2540	5549	5761	3090	3126	2992	5110	4507	3133
R	840	1066	1014	691	1530	5107	5406	2577	2749	2697	5136	4563	3295
S	2459	2761	2618	1193	2045	5055	5469	2571	2933	2992	5724	5207	4509
T	2541	2806	2620	999	1837	5158	5574	2676	3037	3098	5836	5320	4617
U	3422	3836	4396	5787	6617	4297	3949	3667	3122	2808	1453	951	1071
V	3451	3860	4421	5826	6655	4341	3991	3718	3174	2859	1478	987	1076
W	4335	4928	5349	5666	6566	1755	1490	2102	1621	1563	1625	1604	3271
X	2056	2653	3069	3713	4598	3490	3543	1654	1257	954	2805	2249	1977
Y	1928	2514	2958	3767	4644	3662	3670	1855	1467	1163	2728	2152	1719
Z	4916	5518	5803	5402	6256	811	1378	1697	1703	1952	3451	3410	4700
AA	4646	5252	5586	5437	6316	928	1205	1660	1459	1628	2845	2794	4181
AB	5501	5965	6512	7620	8496	4126	3540	4644	4080	3865	1008	1476	3237
AC	3070	3474	4035	5478	6297	4502	4226	3567	3044	2721	1930	1369	720
AD	3268	3623	4192	5751	6552	4722	4404	3887	3359	3037	1936	1434	746
AE	3369	3694	4265	5875	6671	5000	4695	4092	3569	3246	2207	1723	823
AF	3033	3440	4001	5434	6255	4450	4176	3523	2993	2672	1746	1226	709
AG	3281	3623	4193	5783	6579	4937	4628	4029	3506	3183	2153	1660	746
AH	4307	4913	5264	5230	6118	1303	1444	1481	1173	1296	2597	2486	3804